

REMARKS

The Office Action of November 13, 2007 has been reviewed and the Examiner's comments carefully considered. Claims 6-11 are pending in this application, and claim 6 is in independent form.

The Examiner has objected to the disclosure due to the presence of a minor grammatical correction required on page 2, line 11. In particular, the Examiner has correctly noted that the phrase "has tenting" should be changed to "as tenting." This modification has been implemented by the foregoing Amendment, and withdrawal of the objection to the disclosure is respectfully requested.

The Examiner has rejected claims 6-11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,371,284 to Pasch. In view of the following remarks, Applicant respectfully requests reconsideration of these rejections.

Summary of the Invention

As set forth in independent claim 6, the present invention is directed to a conveyor belt for a system in which the conveyor belt is spirally wound around a driven drum. The conveyor belt comprises a repeating interconnected arrangement of: (a) longitudinally spaced rods, each extending in a lateral direction defining first and second ends between a central conveying section; and (b) connective links connecting the rods together. Each connective link includes legs extending in a longitudinal direction from a lateral cross-member at a closed first end and to an open second end, and defining laterally aligned first apertures on each of the legs at the closed end for reception of a rod. Laterally aligned second apertures are provided at the open end for reception of the rod, and the first apertures of a first link are aligned with the second apertures of a second link for reception of the rod

therein. In addition, the rods are fused to the second apertures on the outside edge of the belt. The arrangement also includes protection means arranged on the first link for protecting the fusion of the second link, at least when the links are in contact with the driven drum.

The Cited Prior Art

The Pasch patent is directed to a system for conveying objects. In addition, the device of the Pasch patent includes a conveyor belt having an interconnected arrangement of longitudinally spaced rods and connective links. Further, the Pasch device provides connective links with aligned apertures, where a third connection member 14 serves to protect a weld (or fusion) 21 located on the end of the rod 1. In particular, and as specifically illustrated in Figs. 1 and 2 of the Pasch patent, this third connection member 14 creates a V-shaped profile that protects the weld 20 and/or further weld 21 from impact or damage. This arrangement is best illustrated in Fig. 2B of the Pasch patent.

The Pasch Patent Does Not Teach or Suggest the Interconnected Arrangement of Claim 6

The Examiner is correct that the third connection member 14 is used as part of the Pasch arrangement to provide a more stable construction. In addition, it is this member that serves to provide additional structural continuity and attachment between the rod 1 and connection element 6. Accordingly, and as illustrated in Fig. 2B of the Pasch patent, the third connection member 14 provides some protection to the fusion or weld area when the links are in contact with the driven drum.

However, Applicant respectfully submits that there is at least one key difference between the device of the Pasch patent and the arrangement of the present invention (as set forth in claim 6). In particular, claim 6 specifically recites that the

“protection means arranged on the first link [are] for protecting the fusion of the second link, at least when the links are in contact with the driven drum.” (Emphasis added). In particular, and as illustrated in Fig. 3 of the present application, each connective link 4 includes legs 6 extending in a longitudinal direction from a lateral cross member 7 at a closed first end 8 into an open second end 9. Further, on a first link, protecting means 12 are arranged to protect the fusion 13 of a second link when it is in contact with the drum. Therefore, the arrangement of the present invention does not utilize some protection means on any specific link to protect the fusion or weld of the rod extending through that link. Instead, and as specifically claimed, a first link is used to protect the fusion or weld of a second link, which results in a number of efficiencies in both manufacture and operation.

The use of the extended leg as the protection means for protecting the fusion of the second link, as claimed in independent claim 6 of the present application, results in a contiguous surface and contact area between the side of the conveyor belt and the drum. In manufacture, the connective link of the Pasch device is much less efficient, more complex and more costly than the novel “extended leg” design of the presently-invented conveyor belt. Still further, installation of the connective links in the presently-invented system is much easier, since access to the fusion area on each link is more readily accessible for placement of the weld (since the third connection member 14 of the Pasch device shrouds the fusion area). In the Pasch system, after the appropriate welds 20, 21 have been provided, the leg would need to be bent backwards, and in any case, provide extremely limited access to the fusion area or weld. With the present invention, it is possible to still protect the fusions, but without requiring any additional bending operation after the belt is assembled and the rods are welded to the links. In addition, and based upon the unique arrangement of the links and protection means of the present invention, as compared to the Pasch system, the conveyor belt of the

present invention can provide a smaller bending radius than that of the Pasch system. In the Pasch system, the extended leg is bent backwards, which blocks a smaller bending radii.

Regardless of the above-discussed inefficiencies, extra costs and complexities involved with manufacturing and installation, and in summary, the Pasch patent neither teaches nor suggests a conveyor belt having repeating interconnected arrangements that include protection means arranged on a first link for protecting the fusion of a second link, as specifically set forth in independent claim 6. Therefore, the claimed conveyor belt and unique interconnected arrangements are clearly distinguishable from the cited prior art, and in addition, lead to the many benefits listed above in overcoming certain drawbacks involved with the use of a conveyor belt manufactured in accordance with the Pasch patent.

Summary

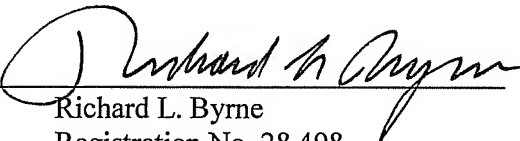
For the foregoing reasons, independent claim 6 is not anticipated by or rendered obvious over the Pasch patent or any of the prior art of record, whether used alone or in combination. There is no hint or suggestion in any of the references cited by the Examiner to combine these references in a manner which would render the invention, as claimed, obvious. Reconsideration of the rejection of independent claim 6 is respectfully requested.

Claims 7-11 depend either directly or indirectly from and add further limitations to independent claim 6 and are believed to be allowable for the reasons discussed hereinabove in connection with independent claim 6. Further, many of these dependent claims include features and arrangements that are neither taught in nor suggested by the prior art of record. Therefore, for all the above reasons, reconsideration of the rejections of claims 7-11 is respectfully requested.

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For all the foregoing reasons, Applicant believes that claims 6-11 are patentable over the cited prior art and in condition for allowance. Reconsideration of the rejections and allowance of all pending claims 6-11 are respectfully requested.

Respectfully submitted,
THE WEBB LAW FIRM

By 
Richard L. Byrne
Registration No. 28,498
Attorney for Applicant
436 Seventh Avenue
700 Koppers Building
Pittsburgh, PA 15219
Telephone: (412) 471-8815
Facsimile: (412) 471-4094
E-mail: webblaw@webblaw.com